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In the Claims

1-33.   (Canceled)

1   34.   (Currently Amended) A digital micro-mirror device projection system for

2   outputting a stereoscopic encoded optical signal comprising

3   3D data formatter for accepting input stereoscopic image signals having an input

4   frame rate, processing said input signals, and providing an output signal characterized by

5   ~~an~~ a self synchronized output frame rate independent of and decoupled from the input

6   frame rate,

7   wherein said self synchronized output frame rate is predetermined or set

8   by a user;

9   a digital micro-mirror device data formatter for receiving an input stereoscopic

10   image and control signal at the output frame rate generated by the 3D data formatter, and

11   for outputting an output stereoscopic image and control signal including

12   color wheel control signals indicative of rotation rate;

13   output digital micro-mirror device data indicative of micro-mirror

14   switching rates;

15   ~~optionally 3D field signal for synchronization with an optional active~~

16   ~~rotator of a 3D encoder sub-system;~~

17   wherein said color wheel control signal, output digital micro-mirror device

18   data and optional 3D field signal are synchronized based on the output frame rate

19   generated by the 3D data formatter;

20   said digital micro-mirror device data formatter comprising

21   a dual port memory controller that converts input stereoscopic

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22   image and control signal at the output frame rate from a full color image

23   into an image stream having serial individual color images synchronized

24   to the rotation of the color wheel based on the output frame rate;

25   a memory device;

26   a digital micro-mirror device data converter for formatting data

27   into a format readable by a digital micro-mirror chip;

28   a micro-controller for setting the register values of the dual port

29   memory controller based on the 3D format and sets the optional 3D field

30   signal;

31   an illumination source including

32   a lamp for transmitting light to condensing optics, light from said

33   condensing optics being transmitted to a rotating color wheel,

34   the rotating color wheel coupled to digital micro-mirror device

35   data formatter for receiving color signal data indicative of rotation rate

36   synchronized based on the output frame rate generated by the 3D data formatter;

37   a digital micro-mirror chip receiving the output digital micro-mirror device data

38   synchronized with the output frame rate generated by the 3D data formatter from the

39   digital micro-mirror device data formatter and reflecting, from micro-mirrors of the

40   digital micro-mirror chip, light received from said color wheel;

41   a 3D encoder system having a first 3D encoder sub-system integrated with said

42   color wheel, said 3D encoder system synchronized with the output frame rate generated

43   by the 3D data formatter; and

44   projection optics for projecting light reflected from said digital micro-mirror chip.

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1 35. (Previously Presented) A stereoscopic projection system comprising the

2 digital micro-mirror device projection system as in claim 34 and an optical decoder for

3 allowing a viewer to perceive stereoscopic images.

1 36. (Previously Presented) The stereoscopic projection system as in claim 35,

2 wherein the optical decoder comprises passive polarizing lenses having one polarization

3 state corresponding to one eye and another polarization state corresponding to another

4 eye.

1 37. (Previously Presented) The stereoscopic projection system as in claim 35,

2 wherein the optical decoder comprises active shutter glasses.

1 38. (Currently Amended) The digital micro-mirror device projection system as in

2 claim ~~1~~34, wherein said self synchronized output frame rate is set or selected to reduce

3 appearance of flicker.

1 39. (Previously Presented) The digital micro-mirror device projection system

2 as in claim 1, wherein the output signal of the 3D data formatter is Color Sequential

3 stereoscopic data.

1 40. (Currently Amended) The digital micro-mirror device projection system as in

2 claim ~~1~~34, wherein the output signal of the 3D data formatter is Frame Sequential

3 stereoscopic data.

1 41-48. (Canceled)